CRYPTOMECHANICS

NPLabs' mastery of simple Newtonian physics concepts, earned from completing training exercises like this one, will someday help to unlock the secrets of the delicate balance of the universe.

These towers are from the game Konexi, a cross between a word game and a dexterity/balance game.
Add one letter to the tower given the following restrictions:

     1) You may not add a letter that already appears in the tower. The game only has one of each letter of the alphabet.

     2) You may not rearrange the letters already in the tower.

     3) You must insert your letter into one of the <u>notches</u> of one of the letters in the tower (rather than putting one of its notches onto a "serif" of a letter in the tower). Sticking the letter between the uprights of a U, the legs of an A, etc., doesn't count.

     4) The notch must be able to support the weight of the letter without it falling out, i.e. the notch must be angled upwards so that it accepts a letter from above. The notch must also not be blocked by other letters in the tower. No letter could be added to the G in Tower #1, as the I is blocking the only upward-pointing notch.

     5) You must position the letter in the tower so that a word that fits the clue under the tower may be spelled using the newly introduced letter plus a selection of letters from the tower that are connected directly to it, notch-to-serif, without any extraneous letters between them. So in Tower #1 below, if the O were still available, you could add it to the H to make HOG (the letters may be out of sequence in the tower), but not to make HOW, since the G is between the H and W.

PHYSICS CONCEPT THAT IS
USEFUL IN THIS GAME

MAKE IT INTO THE
NEXT ROUND

FRUIT THAT'S SIMILAR
IN APPEARANCE TO A PEAR

SOUND LIKE AN UPSET CHICKEN

NOT SEE-THROUGH

PIEZOELECTRIC CRYSTAL


CLOSE YOUR EYES AGAINST THE SUN
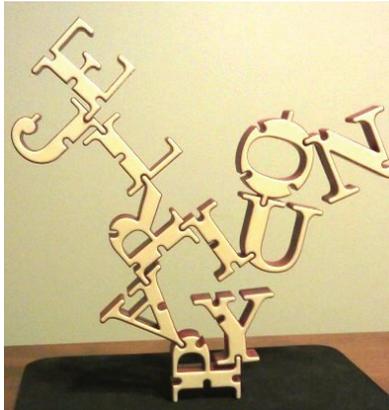
IT'S OFTEN KEPT IN A LOCKED CABINET

GET ONE'S HANDS ON
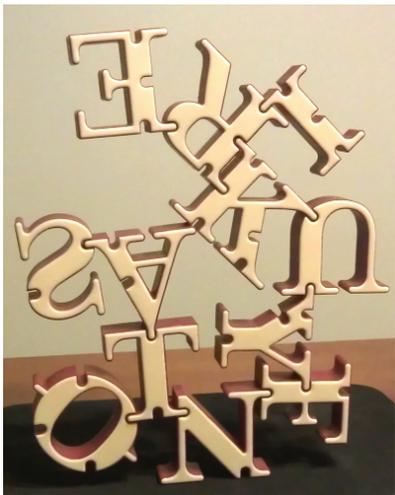
DELIGHTFULLY, OR MILDLY, STRANGE

POLICE CAR, SLANGILY = _____ CAR

SHARED PROBLEM FOR DENTAL AND HEART PATIENTS